

Evaluating the teaching abilities of Residents to assess the effectiveness of their instruction.

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Abstract

Objective: Interns are frequently given teaching responsibilities in Pakistan. Interns are often recruited at the bottom of the teaching scale with little or no teaching experience and usually without any formal teacher training while pursuing undergraduate programs.

Methodology: Assess the interns' level of teaching skill, so that if needed, appropriate action can be taken to raise the bar on instruction. This cross-sectional study was conducted by University of Faisalabad, from April to June 2023. Using Medical Education Teaching Readiness Questionnaire (METRQ) the knowledge, skill and attitude of the responders based on different experiences pertaining to medical teaching were accessed from fifty first-year dental interns approached for the questionnaire that was statistically evaluated in SPSS 21.

Results: Forty (80%) of the interns considered that mastering the basics of teaching, for example planning "what to teach" was necessary, but they were not prepared to teach. For skills, 38 (76%) respondents said that viewing their lecturers was very helpful, while only 1 (2%) said receiving feedback on their own instruction was helpful. At graduation, most of the factors, ranked as traits of teaching—such as drive, excitement, and competence—began to depreciate. When some experience in teaching had been accumulated during the internship, similar qualities showed clearly higher ratings.

Conclusion: In creating teacher-training programs or assessing the current state of those teaching in the health professions, METRQ can be a great tool to conduct needs assessments. Important for improving the quality of instruction and, thereby, the quality of education, are teacher training programs.

Keywords: Aptitude, Cross sectional studies, Needs Assessment, Teacher training.

Introduction:

Good teaching involves a very active use of knowledge and skills in teaching and hence a strong interplay of hard work and doggedness with a solid rock understanding of the basic principle by the teacher themselves as well as some passion for teaching (Vaughn, Ph., & Baker, 2001). Since training on the job is of a traditional approach, I can say that it would not be suitable for times and situations now that, attention on instruction has shifted focus from instructor-centered to more student-centered activities. Outside of lecturing, traditionally a teacher's primary duty, a teacher can conduct eleven other functions (Harden & Crosby, 2000).

The best possible learning environment is achieved when a number of roles are played at the same time.

This study will look into the differences in the several medical education experiences that shape the knowledge and competencies of interns as teachers.

Methods: This cross-sectional study was conducted at the University College of Dentistry, The University of Lahore, from April to June 2017. A total of 50 interns were approached, and under the process of purposive sampling, it was conducted with the aim of implementing the Medical Education Teaching Readiness Questionnaire – The Intern's Perspective (Henry, Haworth & Hering, 2006). The study was conducted with first-year interns only, and priority was given to interns from other medical universities. The pre-tested and reliable METRQ questionnaire fulfills the purpose of knowing how their medical college experience has affected the performance of interns in teaching. It includes nine sections with various response forms, such as multiple-choice questions, fill-in-the-blanks, options of seven-point Likert scale, and yes/no replies. This questionnaire was applied after getting permission from the authors. Since each intern was approached separately and asked to complete the

questionnaire under supervision to prevent any misunderstandings or confusion on their behalf regarding any of the terms or questions in the questionnaire, the response rate was 100%.

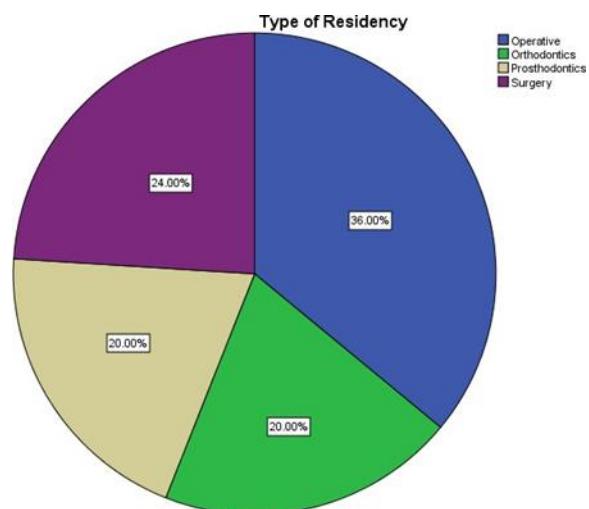
This version of IBM SPSS used to analyze the data whereby all the quantitative variables appear as percentages and frequencies.

Results:

Demographics: The investigation included interns from four clinical specialties: orthodontics, prosthodontics, surgery, and operations. (Figure 1)

Results of different components of the questionnaire are reported as follows:

Figure 1: Distribution of interns



The first three items of the questionnaire about teaching functions were just an exercise in warm-up. Items 1 and 2 were intended to obtain estimates from the residents concerning their general experience to prompt recall of present instructional activities. Out of all respondents, 48 percent or 24 responded that they taught students for 11 to 20 hours during the past month. This was the greatest proportion of the total hours: either instruction in clinical skills and

procedures to students or teaching on how to assess patients. Item 3, which asked when learning to teach occurred most, was answered "during internship" by 54% (27 respondents). In addition, in an effort to find out the attitudes that characterize the students, it required respondents to respond on how far they would agree if only to indicate the fact of possessing some particular talent. Lesson planning and the assessment of the students are the crucial concerns of 40 of 80 respondents. What's more, the comment is viewed as of vital importance by 74% of respondents (37) while 72% (36) regard as crucially important the method by which information was conveyed.

Item 4B was the question of: How ready do you now feel to teach in these topics? It mirrored how it was that respondent felt, at that moment, about how prepared they were to deliver. In simple words, this item was designed to assess how ready the interns felt about teaching. The majority of the interns said they were ill-prepared to plan lessons (88%), provide relevant content (86%), and evaluate students (78%). Additionally, just 52% of the respondents were at least a little prepared to give feedback to students.

Activities were the point number 5 to be undertaken to prompt respondents to grade the value that they deemed each activity provided. This was to see what training or learning activity was instrumental in helping the respondent achieve professional development in their careers as teachers, as seen in Table 1. The outcome of this exercise was that seventy-six percent of the thirty-eight respondents averred seeing their lecturers was very helpful to enable themselves better as instructors. Similarly, a similar result was obtained whereby seventy percent of the participants declared that it was the same as "reviewing the lesson preparation".

Item 6 asked students to recall if they had undertaken any practice teaching during their senior year.

Only 26% of the students mentioned attending more than ten sessions within their senior year; on the other hand, 18% of the students attended no teaching sessions at all. Most of those surveyed co-facilitated a

total of one to six. Half of the students had adequate teaching experiences the same or even fewer and on the other half felt not enough. Only 54% of all respondents who had taught during their internship year reported receiving feedback, and an infinitesimally small proportion of those reported it to be helpful. Question 7 was related to respondents who had been exposed to an official learning-to-teach course. Since no one intern had ever gone through any official course that taught him or her how to teach, all respondents opted out of this section.

Question Item 8: This questioned the views of respondents of themselves as instructors on a continuum built around teaching traits. While most of the factors at graduation, deemed teaching characteristics like drive, excitement and competence, showed a steep decline, when some of them gained actual teaching experience during the internship, exactly the same showed noticeably greater values (Tables 2, 3 and 4).

Discussion: All the participants of this study were working as teaching assistants, as their answers to the warm-up questions gave relevant and meaningful responses. As stated by the respondents themselves, as teaching assistants, they had valued basic activities like planning lessons, delivering materials, giving feedback, and assessing the students. They were not, however, well equipped to do so. Most were, at best, and only moderately equipped to give feedback to pupils. Similarly in the teaching instruction area: only half said that they would have liked more opportunity to teach in the last year.

Most respondents described themselves as bored, unproductive, unorganized, frustrated, and unmotivated during graduation. All these features further exemplified their disinterest towards the "Teaching Characteristics" section. That can be the only reason to experience such high improvement levels in enthusiasm, effectiveness, fulfillment, and motivation from working as an intern during the internship. The classroom must, though not be a place where learning or development of the basic teaching skill for an important profession like health takes place.

As many as half of them regarded the information received about their teaching last year as not helpful. This is the vicious cycle- a cycle to which interns belonged before graduation because of the insufficiently qualified teachers and one which future students will join when they are taught by the same interns with little or no experience at all. The experience of a teacher shapes the attitude and will; a teacher's attitude plays a great role in shaping a student's attitude towards learning. (Bhargava & Dr. Pathy, 2014). Since no formal programs of student teacher preparation are in existence, it is unjustified to put the student students under tutors who are mere interns, having practically experienced little to nothing of being a teacher as depicted above by 0% result for Item 7, which would impact everything seriously since effective teaching is imperative to have quality education basically because teaching is not conveying information but enabling learning. (Chaudhary, Kumar Mahato, Bhatia, & Chaudhary, 2015).

Conclusion:

These can be specialty faculty development programs to develop teacher training programs in the interest of accelerating specific skill set formation among the teachers. Teacher education programs may be reviewed in an effort to enhance the quality of teaching and, therefore the quality of education. By the same token, health care industry employment may also serve as a basis upon which to develop a teacher training program. (Program, Teacher, & Maker, 2015). Learning to teach itself is as daunting of an activity as teaching in any capacity. Neither reading about teaching nor simply reading the book and the like alone will provide adequate knowledge or preparation to be effective as

an educator. Skill builds gradually because of suitable modeling and training, chances for applied experience, nurturing encouragement and support, and evaluative feedback. (Foley, Amber Benedict, Lynn Holdheide Mary Brownell, 2016).

It is essential to assess each individual's competency and give them tasks suitable for training. In building training programs for teachers or in evaluating the current situation of those teaching in health professions, METRQ can be helpful in doing a needs assessment.

The "Ways of Learning" component can be applied in profiling interns and assigning them to participate in relevant teacher training programs for it may reveal which activities best assist people in honing their teaching abilities. In addition to the initial profiling, it is crucial to conduct periodic reviews of teachers in order to distinguish between those who are effective and those who are not. (Harden & Crosby, 2000). This review should aim to offer interns constructive criticism that helps them improve their skills and capabilities.

Thus, the educators should be better prepared to face medical education's problems and build healthy practitioners who are able participants of this information overload, quick-to-change curriculums era. Therefore, proper programs for education preparation and faculty development have been considered as the way only for this. As added support, WFME quality assurance rules also place additional demands on the meeting fundamental teacher training, development, support, and appraisal for the medical colleague.

Table 1: Activities contributing to the Intern's Professional Growth as a Teacher

| Activity | Not Helpful at All | Somewhat Helpful | Moderately Helpful | Highly Helpful |
|--|--------------------|------------------|--------------------|----------------|
| Received guidance on teaching methods | 5 (10%) | 13 (26%) | 24 (48%) | 8 (16%) |
| Studied printed teaching resources | 1 (2%) | 10 (20%) | 15 (30%) | 16 (32%) |
| Reviewed instructional content | 2 (4%) | 11 (22%) | 35 (70%) | 2 (4%) |
| Observed lessons taught by instructors | 2 (4%) | 8 (16%) | 38 (76%) | 2 (4%) |
| Taught lessons with students | 2 (4%) | 17 (34%) | 28 (56%) | 3 (6%) |
| Engaged in reflective practice on teaching | 4 (8%) | 13 (26%) | 30 (60%) | 3 (6%) |
| Received constructive feedback on teaching performance | 10 (20%) | 6 (12%) | 6 (12%) | 1 (2%) |
| Encouraged to take on teaching responsibilities | 1 (2%) | 7 (14%) | 12 (24%) | 28 (56%) |
| Assigned teaching duties | 2 (4%) | 15 (30%) | 27 (54%) | 6 (12%) |

Table 2: Self-Assessment of Respondents as Teachers During Their First Year of Medical School

| Perception | Bored | Enthusiastic | Neutral |
|--------------------------------|----------|--------------|----------|
| Overall Engagement | 20 (40%) | 23 (46%) | 7 (14%) |
| Teaching Effectiveness | 21 (42%) | 18 (36%) | 11 (22%) |
| Self-Confidence in Teaching | 21 (42%) | 21 (42%) | 8 (16%) |
| Teaching Organization | 17 (34%) | 28 (56%) | 5 (10%) |
| Job Satisfaction | 16 (32%) | 25 (50%) | 9 (18%) |
| Motivation Level | 29 (58%) | 12 (24%) | 9 (18%) |
| Held Teaching Responsibilities | 2 (4%) | 15 (30%) | 27 (54%) |

Table 3: Self-Assessment of Respondents as Teachers at Graduation

| Perception | Bored | Enthusiastic | Neutral |
|-----------------------------|----------|--------------|----------|
| Overall Engagement | 25 (50%) | 9 (18%) | 16 (32%) |
| Teaching Effectiveness | 6 (12%) | 26 (52%) | 18 (36%) |
| Self-Confidence in Teaching | 26 (52%) | 11 (22%) | 10 (20%) |
| Teaching Organization | 33 (66%) | 6 (12%) | 11 (22%) |
| Job Satisfaction | 24 (48%) | 6 (12%) | 20 (40%) |

Table 4: Self-Assessment of Respondents as Teachers During Internship

| Perception | Bored | Enthusiastic | Neutral |
|----------------------------|----------|--------------|---------|
| Engagement Level | 6 (12%) | 39 (78%) | 5 (10%) |
| Teaching Proficiency | 43 (86%) | 5 (10%) | 2 (4%) |
| Confidence in Teaching | 37 (74%) | 5 (10%) | 8 (16%) |
| Organization Skills | 2 (4%) | 47 (94%) | 1 (2%) |
| Satisfaction with Teaching | 6 (12%) | 35 (70%) | 9 (18%) |
| Motivation Level | 34 (68%) | 19 (20%) | 6 (12%) |

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